

**LOCKHEED MARTIN**

Date: April 3, 2012
To: Work Assignment Manager: Jeff Catanzarita, EPA/ERTC
From: V. Kansal, Analytical Support Leader, SERAS
Subject: Preliminary Results of VOCs in Air Analysis using SERAS SOP# 1814
Project: Cabo Rojo, WA# 0-130

This document contains the analytical results and report for the following samples:

Chain(s) of Custody #: 2-032112-171616-0015, 2-032112-174259-0016, 2-032112-175005-0017,
2-032112-175125-0018, 2-032112-175226-0019, 2-032112-175316-0020,
2-032112-175435-0021, 2-032112-175708-0022, 2-032112-175900-0023,
2-032112-180018-0024, 2-032112-180128-0025, 2-032112-180247-0026,
2-032112-180403-0027, 2-032112-180503-0028

Analyses: TO-15
No. of Samples: 51
Matrix: Soil Gas

This report contains the results of 51 soil gas samples received on 03/23/12 for analysis of VOCs in Air by
EPA TO-15.

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Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number Sample Location	Method Blank 3/27/2012		0-130-1159 I12-SS		0-130-1171 J1-SS		0-130-1174 J2-SS		0-130-1058 MHS-SS1	
	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767	U	0.178	U	0.178	0.186	0.178	U	0.178
1,1-Dichloroethene	U	0.119	U	0.277	U	0.277	U	0.277	U	0.277
Methylene Chloride	U	0.104	U	0.242	0.263	0.242	0.515	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.119	U	0.277	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.121	U	0.282	U	0.282	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.119	U	0.277	U	0.277	U	0.277	U	0.277
Chloroform	U	0.146	3.11	0.341	U	0.341	0.580	0.341	U	0.341
1,2-Dichloroethane	U	0.121	U	0.282	U	0.282	U	0.282	U	0.282
Benzene	U	0.0958	0.437	0.223	4.84	0.223	5.99	0.223	0.831	0.223
Trichloroethene	U	0.161	U	0.375	0.560	0.375	U	0.375	U	0.375
Toluene	U	0.113	2.96	0.263	13.8	0.263	57.9	0.263	6.53	0.263
Tetrachloroethene	U	0.203	5.06	0.473	409	2.03	198	0.473	U	0.473
Ethylbenzene	U	0.130	0.834	0.303	1.63	0.303	4.80	0.303	0.775	0.303
1,2,4-Trimethylbenzene	U	0.147	1.64	0.343	2.35	0.343	16.1	0.343	1.78	0.343

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1061		0-130-1063		0-130-1065		0-130-1067		0-130-1069	
Sample Location	MHS-SS2		MHS-SS3		MHS-SS4		MHS-SS5		MHS-SS6	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
Methylene Chloride	U	0.242	0.413	0.242	U	0.242	U	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
Chloroform	U	0.341	U	0.341	U	0.341	0.707	0.341	U	0.341
1,2-Dichloroethane	U	0.282								
Benzene	0.844	0.223	0.614	0.223	U	0.223	U	0.223	0.435	0.223
Trichloroethene	U	0.375								
Toluene	13.1	0.263	2.62	0.263	3.01	0.263	4.66	0.263	4.48	0.263
Tetrachloroethene	U	0.473	U	0.473	0.490	0.473	1.66	0.473	1.50	0.473
Ethylbenzene	1.94	0.303	U	0.303	U	0.303	U	0.303	0.382	0.303
1,2,4-Trimethylbenzene	7.19	0.343	0.704	0.343	0.687	0.343	0.998	0.343	1.08	0.343

Table 1.1 Result of the Analysis for VOC(µg/m³) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1071		0-130-1091		0-130-1093		0-130-1095	
Sample Location	MHS-SS7		FH-SS		44A-SS		44B-SS	
Analyte	Results µg/m ³	RL µg/m ³						
Vinyl Chloride	U	0.178	U	0.178	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277
Methylene Chloride	U	0.242	U	0.242	U	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277
Chloroform	U	0.341	U	0.341	0.635	0.341	0.606	0.341
1,2-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282
Benzene	U	0.223	0.403	0.223	0.357	0.223	2.82	0.223
Trichloroethene	U	0.375	0.467	0.375	U	0.375	U	0.375
Toluene	8.93	0.263	3.14	0.263	2.99	0.263	9.33	0.263
Tetrachloroethene	U	0.473	7.25	0.473	1.25	0.473	1.68	0.473
Ethylbenzene	U	0.303	0.703	0.303	0.405	0.303	0.819	0.303
1,2,4-Trimethylbenzene	0.744	0.343	1.01	0.343	1.20	0.343	1.35	0.343

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1143		0-130-1145		0-130-1147		0-130-1149		0-130-1152	
Sample Location	PFCS-SS1		PFCS-SS2		PFCS-SS3		PFCS-SS4		PFCS-SS5	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	U	0.375	1.76	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethene	U	0.473	1.58	0.473	0.663	0.473	U	0.473	6.99	0.473

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1154		0-130-1156		0-130-1161		0-130-1164		0-130-1166	
Sample Location	PFCS-SS6		PFCS-SS7		15CX-SS		15ACX-SS		13CX-SS	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	U	0.375								
Tetrachloroethene	8.38	0.473	0.828	0.473	1.70	0.473	1.59	0.473	0.665	0.473

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1168 CX6-SS		0-130-1075 CSA-SS1		0-130-1077 CSA-SS2		0-130-1079 CSA-SS3		0-130-1081 CSA-SS4	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethylene	2.22	0.375	U	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethylene	20.4	0.473	1.17	0.473	U	0.473	1.32	0.473	0.727	0.473

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number 0-130-1085 0-130-1087
Sample Location CSA-SS6 CSA-SS7

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	0.531	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282
Trichloroethene	U	0.375	U	0.375
Tetrachloroethene	U	0.473	1.59	0.473

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number Sample Location	Method Blank 3/28/2012		0-130-1128 I15-SS		0-130-1130 J3-SS		0-130-1133 J4-SS		0-130-1135 L-SS	
	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Analyte										
Vinyl Chloride	U	0.178	U	0.178	U	0.212	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277	U	0.329	U	0.277	U	0.277
Methylene Chloride	U	0.242	0.436	0.242	0.495	0.288	0.263	0.242	U	0.242
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.329	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.335	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.329	U	0.277	U	0.277
Chloroform	U	0.341	3.64	0.341	23.5	0.405	0.799	0.341	U	0.341
1,2-Dichloroethane	U	0.282	U	0.282	U	0.335	U	0.282	U	0.282
Benzene	U	0.223	4.68	0.223	2.32	0.265	0.714	0.223	0.396	0.223
Trichloroethene	U	0.375	U	0.375	U	0.445	U	0.375	U	0.375
Toluene	U	0.263	20.5	0.263	26.6	0.312	3.98	0.263	5.76	0.263
Tetrachloroethene	U	0.473	2.73	0.473	40.6	0.562	1.70	0.473	5.50	0.473
Ethylbenzene	U	0.303	4.82	0.303	3.80	0.360	0.387	0.303	0.358	0.303
1,2,4-Trimethylbenzene	U	0.343	2.63	0.343	7.40	0.407	0.368	0.343	0.406	0.343

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1138	0-130-1140
Sample Location	PS-SS1	PS-SS2

Analyte	Results	RL	Results	RL
	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277
Methylene Chloride	U	0.242	0.370	0.242
trans-1,2-Dichloroethene	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277
Chloroform	U	0.341	15.0	0.341
1,2-Dichloroethane	U	0.282	U	0.282
Benzene	0.240	0.223	3.01	0.223
Trichloroethene	U	0.375	0.497	0.375
Toluene	2.64	0.263	17.2	0.263
Tetrachloroethene	U	0.473	1.83	0.473
Ethylbenzene	U	0.303	2.71	0.303
1,2,4-Trimethylbenzene	U	0.343	6.35	0.343

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1083		0-130-1097		0-130-1099		0-130-1101		0-130-1104	
Sample Location	CSA-SS5		NC-SS		53DC-SS		10AF-SS		12AF-SS	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277								
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277								
1,2-Dichloroethane	U	0.282								
Trichloroethene	U	0.375								
Tetrachloroethene	2.63	0.473	U	0.473	67.6	0.473	0.942	0.473	1.71	0.473

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814.

Sample Number	0-130-1106 3AF-SS		0-130-1109 52H-SS		0-130-1111 8AF-SS		0-130-1113 55H-SS		0-130-1115 53H-SS	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.178								
1,1-Dichloroethene	U	0.277								
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	1.46	0.277	U	0.277
1,1-Dichloroethane	U	0.282								
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	2.07	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282	1.13	0.282
Trichloroethene	U	0.375	U	0.375	U	0.375	2.68	0.375	0.457	0.375
Tetrachloroethene	11.9	0.473	1.28	0.473	1.98	0.473	2.58	0.473	0.831	0.473

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

	Sample Number 0-130-1117 53C-SS		0-130-1119 49C-SS		0-130-1121 51C-SS		0-130-1123 46C-SS		0-130-1126 50H-SS	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.178	U	0.178	U	0.178	U	0.178	U	0.178
1,1-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	U	0.277
trans-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	U	0.277
1,1-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282	U	0.282
cis-1,2-Dichloroethene	U	0.277	U	0.277	U	0.277	U	0.277	U	0.277
1,2-Dichloroethane	U	0.282	U	0.282	U	0.282	U	0.282	U	0.282
Trichloroethene	U	0.375	U	0.375	U	0.375	U	0.375	U	0.375
Tetrachloroethene	3.31	0.473	2.28	0.473	109	0.473	0.602	0.473	0.823	0.473

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank		0-130-1159		0-130-1171		0-130-1174		0-130-1058	
Sample Location	3/27/2012		I12-SS		J1-SS		J2-SS		MHS-SS1	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300	U	0.0698	U	0.0698	0.0728	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0300	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	U	0.0300	U	0.0698	0.0757	0.0698	0.148	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0300	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0300	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0300	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chloroform	U	0.0300	0.636	0.0698	U	0.0698	0.119	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0300	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Benzene	U	0.0300	0.137	0.0698	1.51	0.0698	1.87	0.0698	0.260	0.0698
Trichloroethene	U	0.0300	U	0.0698	0.104	0.0698	U	0.0698	U	0.0698
Toluene	U	0.0300	0.785	0.0698	3.66	0.0698	15.4	0.0698	1.73	0.0698
Tetrachloroethene	U	0.0300	0.746	0.0698	60.3	0.300	29.1	0.0698	U	0.0698
Ethylbenzene	U	0.0300	0.192	0.0698	0.375	0.0698	1.11	0.0698	0.178	0.0698
1,2,4-Trimethylbenzene	U	0.0300	0.333	0.0698	0.479	0.0698	3.27	0.0698	0.362	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1061		0-130-1063		0-130-1065		0-130-1067		0-130-1069	
Sample Location	MHS-SS2		MHS-SS3		MHS-SS4		MHS-SS5		MHS-SS6	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
Methylene Chloride	U	0.0698	0.119	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
Chloroform	U	0.0698	U	0.0698	U	0.0698	0.145	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698								
Benzene	0.264	0.0698	0.192	0.0698	U	0.0698	U	0.0698	0.136	0.0698
Trichloroethene	U	0.0698								
Toluene	3.49	0.0698	0.696	0.0698	0.798	0.0698	1.24	0.0698	1.19	0.0698
Tetrachloroethene	U	0.0698	U	0.0698	0.0722	0.0698	0.244	0.0698	0.222	0.0698
Ethylbenzene	0.447	0.0698	U	0.0698	U	0.0698	U	0.0698	0.0881	0.0698
1,2,4-Trimethylbenzene	1.46	0.0698	0.143	0.0698	0.140	0.0698	0.203	0.0698	0.220	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1071	0-130-1091	0-130-1093	0-130-1095
Sample Location	MHS-SS7	FH-SS	44A-SS	44B-SS

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	U	0.0698	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Chloroform	U	0.0698	U	0.0698	0.130	0.0698	0.124	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Benzene	U	0.0698	0.126	0.0698	0.112	0.0698	0.883	0.0698
Trichloroethene	U	0.0698	0.0868	0.0698	U	0.0698	U	0.0698
Toluene	2.37	0.0698	0.832	0.0698	0.793	0.0698	2.48	0.0698
Tetrachloroethene	U	0.0698	1.07	0.0698	0.184	0.0698	0.247	0.0698
Ethylbenzene	U	0.0698	0.162	0.0698	0.0933	0.0698	0.189	0.0698
1,2,4-Trimethylbenzene	0.151	0.0698	0.206	0.0698	0.245	0.0698	0.275	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1143		0-130-1145		0-130-1147		0-130-1149		0-130-1152	
Sample Location	PFCS-SS1		PFCS-SS2		PFCS-SS3		PFCS-SS4		PFCS-SS5	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	U	0.0698	0.328	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	0.233	0.0698	0.0978	0.0698	U	0.0698	1.03	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air.
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1154		0-130-1156		0-130-1161		0-130-1164		0-130-1166	
Sample Location	PFCS-SS6		PFCS-SS7		15CX-SS		15ACX-SS		13CX-SS	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	U	0.0698								
Tetrachloroethene	1.24	0.0698	0.122	0.0698	0.250	0.0698	0.235	0.0698	0.0981	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1168		0-130-1075		0-130-1077		0-130-1079		0-130-1081	
Sample Location	CX6-SS		CSA-SS1		CSA-SS2		CSA-SS3		CSA-SS4	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698								
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	0.414	0.0698	U	0.0698	U	0.0698	U	0.0698	U	0.0698
Tetrachloroethene	3.00	0.0698	0.172	0.0698	U	0.0698	0.195	0.0698	0.107	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number 0-130-1085 0-130-1087
Sample Location CSA-SS6 CSA-SS7

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	0.134	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
Trichloroethene	U	0.0698	U	0.0698
Tetrachloroethene	U	0.0698	0.235	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank		0-130-1128		0-130-1130		0-130-1133		0-130-1135	
Sample Location	3/28/2012		I15-SS		J3-SS		J4-SS		L-SS	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	0.125	0.0698	0.143	0.0829	0.0758	0.0698	U	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
Chloroform	U	0.0698	0.746	0.0698	4.81	0.0829	0.164	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
Benzene	U	0.0698	1.47	0.0698	0.728	0.0829	0.224	0.0698	0.124	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0829	U	0.0698	U	0.0698
Toluene	U	0.0698	5.45	0.0698	7.05	0.0829	1.06	0.0698	1.53	0.0698
Tetrachloroethene	U	0.0698	0.402	0.0698	5.98	0.0829	0.251	0.0698	0.811	0.0698
Ethylbenzene	U	0.0698	1.11	0.0698	0.875	0.0829	0.0891	0.0698	0.0826	0.0698
1,2,4-Trimethylbenzene	U	0.0698	0.535	0.0698	1.51	0.0829	0.0749	0.0698	0.0825	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number:	0-130-1138	0-130-1140
Sample Location	PS-SS1	PS-SS2

Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0698	U	0.0698
1,1-Dichloroethene	U	0.0698	U	0.0698
Methylene Chloride	U	0.0698	0.107	0.0698
trans-1,2-Dichloroethene	U	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698	U	0.0698
cis-1,2-Dichloroethene	U	0.0698	U	0.0698
Chloroform	U	0.0698	3.08	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698
Benzene	0.0751	0.0698	0.943	0.0698
Trichloroethene	U	0.0698	0.0925	0.0698
Toluene	0.700	0.0698	4.55	0.0698
Tetrachloroethene	U	0.0698	0.270	0.0698
Ethylbenzene	U	0.0698	0.625	0.0698
1,2,4-Trimethylbenzene	U	0.0698	1.29	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1083		0-130-1097		0-130-1099		0-130-1101		0-130-1104	
Sample Location	CSA-SS5		NC-SS		53DC-SS		10AF-SS		12AF-SS	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698								
cis-1,2-Dichloroethane	U	0.0698								
1,2-Dichloroethane	U	0.0698								
Trichloroethene	U	0.0698								
Tetrachloroethene	0.388	0.0698	U	0.0698	9.96	0.0698	0.139	0.0698	0.253	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1106	0-130-1109	0-130-1111	0-130-1113	0-130-1115
Sample Location	3AF-SS	52H-SS	8AF-SS	55H-SS	53H-SS

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0698								
1,1-Dichloroethene	U	0.0698								
trans-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.369	0.0698	U	0.0698
1,1-Dichloroethane	U	0.0698								
cis-1,2-Dichloroethene	U	0.0698	U	0.0698	U	0.0698	0.521	0.0698	U	0.0698
1,2-Dichloroethane	U	0.0698	U	0.0698	U	0.0698	U	0.0698	0.278	0.0698
Trichloroethene	U	0.0698	U	0.0698	U	0.0698	0.498	0.0698	0.0850	0.0698
Tetrachloroethene	1.76	0.0698	0.188	0.0698	0.292	0.0698	0.380	0.0698	0.123	0.0698

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

	Sample Number		0-130-1117		0-130-1119		0-130-1121		0-130-1123		0-130-1126	
	Sample Location		53C-SS		49C-SS		51C-SS		46C-SS		50H-SS	
Analyte	Results ppbv	RL ppbv										
Vinyl Chloride	U	0.0698										
1,1-Dichloroethene	U	0.0698										
trans-1,2-Dichloroethene	U	0.0698										
cis-1,2-Dichloroethane	U	0.0698										
1,2-Dichloroethane	U	0.0698										
Trichloroethene	U	0.0698										
Tetrachloroethene	0.488	0.0698	0.336	0.0698	16.1	0.0698	0.0888	0.0698	0.121	0.0698		

USEPA

Date Shipped: 3/1/2012
Carrier Name: FedEx
Airbill No: 89915589218105
W# R203016

Lab # Sample # Loca

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-171616-0015

Cooler #: 1

Lab: SERAS

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Date	Stop Time
01	0-130-1143	PFCS-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	14240	14007	-30	-6	3/21/2012	8:34:00 AM
02	0-130-1144	PFCS-IA1	TCE, PCE plus 6	Air ✓	1	SUMMA	115	14029	-30	-2	3/21/2012	8:34:00 AM
03	0-130-1145	PFCS-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	14230-73 14238-37/h	13780	-30	-6.5	3/21/2012	8:38:00 AM
04	0-130-1146	PFCS-IA2	TCE, PCE plus 6	Air ✓	1	SUMMA	19	13799	-30	-1.5	3/21/2012	8:38:00 AM
05	0-130-1147	PFCS-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	138	13913	-30	-6.5	3/21/2012	8:44:00 AM
06	0-130-1148	PFCS-IA3	TCE, PCE plus 6	Air ✓	1	SUMMA	111	13908	-30	-2.5	3/21/2012	8:44:00 AM
07	0-130-1149	PFCS-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	195	14032	-30	-6	3/21/2012	8:48:00 AM
08	0-130-1150	PFCS-IA4	TCE, PCE plus 6	Air ✓	1	SUMMA	223	13906	-30	-3	3/21/2012	8:48:00 AM
09	0-130-1151	PFCS-IA5	TCE, PCE plus 6	Air ✓	1	SUMMA	1138	13990	-30	-2.5	3/21/2012	8:48:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

CHAIN OF CUSTODY RECORD

Caba Roja

Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

№: 2-932112-173259-2016

Page 1

Labi: SERAS

W# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Start Date	Stop Date	Stop Time
10	0-130-1152	PFCS-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	104	13923	-30	-11.5	3/21/2012	3/21/2012	8:54:00 AM
11	0-130-1153	PFCS-IA6	TCE, PCE plus 6	Air /	1	SUMMA	184	13766	-30	-3	3/21/2012	3/21/2012	8:54:00 AM
12	0-130-1154	PFCS-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	24	13929	-30	-6	3/21/2012	3/21/2012	9:04:00 AM
13	0-130-1155	PFCS-IA7	TCE, PCE plus 6	Air /	1	SUMMA	11508	13911	-30	-3	3/21/2012	3/21/2012	9:04:00 AM
14	0-130-1156	PFCS-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	241	13936	-30	-7.5	3/21/2012	3/21/2012	8:59:00 AM
15	0-130-1157	PFCS-IA8	TCE, PCE plus 6	Air /	1	SUMMA	14246	13761	-30	-2.5	3/21/2012	3/21/2012	8:59:00 AM
16	0-130-1158	PFCS-AMB	TCE, PCE plus 6	Air /	1	SUMMA	22	13781	-30	-2.5	3/21/2012	3/21/2012	9:07:00 AM
17	0-130-1159	I12-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	12625	13789	-30	-6	3/21/2012	3/21/2012	12:05:00 PM
18	0-130-1160	I12-IA	TCE, PCE plus 12	Air	1	SUMMA	200	14016	-30	-5	3/21/2012	3/21/2012	12:05:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 1,2,4-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

USEPA

CHAIN OF CUSTODY RECORD

Cabo Roja

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175005-0017

Cooler #: 1

Lab: SERAS

WOF#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Date	Stop Time
19	0-130-1161	15CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	256	13782	-30	-7	3/21/2012	1:35:00 PM
20	0-130-1162	15CX-IA1	TCE, PCE plus 6	Air	1	SUMMA	14068	14039	-30	-4	3/21/2012	1:35:00 PM
21	0-130-1163	15CX-IA2	TCE, PCE plus 6	Air	1	SUMMA	14072	13790	-30	-5.5	3/21/2012	1:35:00 PM
22	0-130-1164	115ACX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	23	13988	-30	-6	3/21/2012	1:44:00 PM
23	0-130-1165	115ACX-IA	TCE, PCE plus 6	Air	1	SUMMA	53	13775	-30	-6	3/21/2012	1:44:00 PM
24	0-130-1166	13CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	55	13794	-30	-5	3/21/2012	1:50:00 PM
25	0-130-1167	13CX-IA	TCE, PCE plus 6	Air	1	SUMMA	260	14003	-30	-5.5	3/21/2012	1:50:00 PM
26	0-130-1168	CX6-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	14	14011	-30	-5	3/21/2012	1:57:00 PM
27	0-130-1169	CX6-IA	TCE, PCE plus 6	Air	1	SUMMA	181	14024	-30	-30	3/21/2012	1:57:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo
Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

No: 2-032112-175125-0018

Cooker #: 1

Lab: SERAS

WO# R203016

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene.

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

USEPA

CHAIN OF CUSTODY RECORD

Cabo Roja

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175226-0018

Cooler #: 1

Lab: SERAS

WOT#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
35	0-130-1058	MHS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	219	13928	-30	-2.5	3/21/2012	8:20:00 AM
36	0-130-1059	MHS-IA1	TCE, PCE plus 12	Air ✓	1	SUMMA	261	14005	-30	-1.5	3/21/2012	8:20:00 AM
37	0-130-1060	MHS-IA2	TCE, PCE plus 12	Air ✓	1	SUMMA	14218	13787	-30	-6	3/21/2012	8:20:00 AM
38	0-130-1061	MHS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	12	13914	-30	-0.5	3/21/2012	8:26:00 AM
39	0-130-1062	MHS-IA3	TCE, PCE plus 12	Air ✓	1	SUMMA	173	13782	-30	0.5	3/21/2012	8:26:00 AM
40	0-130-1063	MHS-SS3	TCE, PCE plus 12	Soil Gas	1	SUMMA	193	13916	-30	-2.5	3/21/2012	8:33:00 AM
41	0-130-1064	MHS-IA4	TCE, PCE plus 12	Air ✓	1	SUMMA	209	14001	-30	-8	3/21/2012	8:33:00 AM
42	0-130-1065	MHS-SS4	TCE, PCE plus 12	Soil Gas	1	SUMMA	57	14041	-30	-0.5	3/21/2012	8:38:00 AM
43	0-130-1066	MHS-IA5	TCE, PCE plus 12	Air ✓	1	SUMMA	231	14019	-30	-2	3/21/2012	8:38:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175316-0020

Cooler #: 1

Lab: SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat	Stop_Time
44	0-130-1067	MHS-SS5	TCE, PCE plus 12	Soil Gas	1	SUMMA	257	13794	-30	-3.5	3/21/2012	8:43:00 AM
45	0-130-1068	MHS-IA6	TCE, PCE plus 12	Air	1	SUMMA	66	13953	-30	-4	3/21/2012	8:43:00 AM
46	0-130-1069	MHS-SS6	TCE, PCE plus 12	Soil Gas	1	SUMMA	14069	13921	-30	-3	3/21/2012	8:52:00 AM
47	0-130-1070	MHS-IA7	TCE, PCE plus 12	Air	1	SUMMA	179	13798	-30	-4.5	3/21/2012	8:52:00 AM
48	0-130-1071	MHS-SS7	TCE, PCE plus 12	Soil Gas	1	SUMMA	224	14037	-30	-1	3/21/2012	8:48:00 AM
49	0-130-1072	MHS-IA8	TCE, PCE plus 12	Air	1	SUMMA	26	13960	-30	-1.5	3/21/2012	8:48:00 AM
50	0-130-1073	MHS-AMB1	TCE, PCE plus 12	Air	1	SUMMA	148	14015	-30	-2	3/21/2012	9:01:00 AM
51	0-130-1074	MHS-AMB2	TCE, PCE plus 12	Air	1	SUMMA	239	13942	-30	-2	3/21/2012	9:05:00 AM
52	0-130-1075	CSA-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	263	13933	-30	-4	3/21/2012	9:35:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175435-0021

Cooler #: 1

Lab: SERAS

WO#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Date	Stop_Time
53	0-130-1076	CSA-IA1	TCE, PCE plus 6	Air	1	SUMMA	5	13784	-30	-7	3/21/2012	9:35:00 AM
54	0-130-1077	CSA-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	152	13948	-30	-3.5	3/21/2012	9:39:00 AM
55	0-130-1078	CSA-IA2	TCE, PCE plus 6	Air	1	SUMMA	178	13802	-30	-3	3/21/2012	9:39:00 AM
56	0-130-1079	CSA-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	1131	14004	-30	-1	3/21/2012	9:44:00 AM
57	0-130-1080	CSA-IA3	TCE, PCE plus 6	Air	1	SUMMA	68	14020	-30	-3	3/21/2012	9:44:00 AM
58	0-130-1081	CSA-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	79	14035	-30	-3	3/21/2012	9:52:00 AM
59	0-130-1082	CSA-IA4	TCE, PCE plus 6	Air	1	SUMMA	147	13912	-30	-0.5	3/21/2012	9:52:00 AM
60	0-130-1083	CSA-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	34	13785	-30	-2	3/21/2012	9:57:00 AM
61	0-130-1084	CSA-IA5	TCE, PCE plus 6	Air	1	SUMMA	37	13795	-30	-3.5	3/21/2012	9:57:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12OCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175708-0022

Cooler #: 1

Lab: SERAS

WO#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
62	0-130-1085	CSA-S66	TCE, PCE plus 6	Soil Gas	1	SUMMA	213	13922	-30	-3	3/21/2012	10:02:00 AM
63	0-130-1086	CSA-IA6	TCE, PCE plus 6	Air	1	SUMMA	137	13776	-30	-3	3/21/2012	10:02:00 AM
64	0-130-1087	CSA-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	159	14050	-30	-2.5	3/21/2012	10:07:00 AM
65	0-130-1088	CSA-IA7	TCE, PCE plus 6	Air	1	SUMMA	75	13777	-30	-3	3/21/2012	10:07:00 AM
66	0-130-1089	CSA-IA8	TCE, PCE plus 6	Air	1	SUMMA	242	13943	-30	-1	3/21/2012	10:07:00 AM
67	0-130-1090	CSA-AMB	TCE, PCE plus 6	Air	1	SUMMA	238	13765	-30	-3	3/21/2012	9:48:00 AM
68	0-130-1091	FH-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	118	13767	-30	-4	3/21/2012	10:48:00 AM
69	0-130-1092	FH-IA	TCE, PCE plus 12	Air	1	SUMMA	103	13918	-30	-3	3/21/2012	10:48:00 AM
70	0-130-1093	44A-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	186	13937	-30	-3.5	3/21/2012	10:51:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 1,2-dimethylbenzene.

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175900-0023

Cooler #: 1

Lab: SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
71	0-130-1094	44A-IA	TCE, PCE plus 12	Air	1	SUMMA	222	14023	-30	-2.5	3/21/2012	10:51:00 AM
72	0-130-1095	44B-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	119	13935	-30	-4.5	3/21/2012	10:56:00 AM
73	0-130-1096	44B-IA	TCE, PCE plus 12	Air	1	SUMMA	47	13764	-30	-2	3/21/2012	10:56:00 AM
74	0-130-1097	NC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	107	14038	-30	-4.5	3/21/2012	11:09:00 AM
75	0-130-1098	NC-IA	TCE, PCE plus 6	Air	1	SUMMA	206	14012	-30	-3	3/21/2012	11:09:00 AM
76	0-130-1099	53DC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	157	13991	-30	-4	3/21/2012	11:17:00 AM
77	0-130-1100	53DC-IA	TCE, PCE plus 6	Air	1	SUMMA	43	13793	-30	-8	3/21/2012	11:17:00 AM
78	0-130-1101	10AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	255	13915	-30	-4.5	3/21/2012	11:27:00 AM
79	0-130-1102	10AF-IA	TCE, PCE plus 6	Air	1	SUMMA	59	13986	-30	-3	3/21/2012	11:27:00 AM

Special Instructions: Analyze per PWA, PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

No: 2-032112-180018-0024

Cooper #1

Lab. SERAS

WOTR203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
80	0-130-1103	10AF-AMB	TCE, PCE plus 6	Air	1	SUMMA	14251	13779	-30	-2.5	3/21/2012	11:27:00 AM
81	0-130-1104	12AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	130	13941	-30	-4	3/21/2012	11:33:00 AM
82	0-130-1105	12AF-IA	TCE, PCE plus 6	Air	1	SUMMA	25	13993	-30	-3.5	3/21/2012	11:33:00 AM
83	0-130-1106	3AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	243	13925	-30	-3.5	3/21/2012	11:43:00 AM
84	0-130-1107	3AF-IA1	TCE, PCE plus 6	Air	1	SUMMA	10	13983	-30	-3	3/21/2012	11:43:00 AM
85	0-130-1108	3AF-IA2	TCE, PCE plus 6	Air	1	SUMMA	191	13996	-30	-2.5	3/21/2012	11:43:00 AM
86	0-130-1109	52H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	63	13778	-30	-3.5	3/21/2012	11:54:00 AM
87	0-130-1110	52H-IA	TCE, PCE plus 6	Air	1	SUMMA	14220	13954	-30	-0.5	3/21/2012	11:54:00 AM
88	0-130-1111	8AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	97	14026	-30	-4	3/21/2012	11:49:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180128-0025

Cooler #: 1

Lab. SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
89	0-130-1112	8AF-IA	TCE, PCE plus 6	Air	1	SUMMA	156	13792	-30	-3.5	3/21/2012	11:49:00 AM
90	0-130-1113	55H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	65	13762	-30	-4	3/21/2012	12:03:00 PM
91	0-130-1114	55H-IA	TCE, PCE plus 6	Air	1	SUMMA	8	13801	-30	-2.5	3/21/2012	12:03:00 PM
92	0-130-1115	53H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	192	13998	-30	-1	3/21/2012	12:10:00 PM
93	0-130-1116	53H-IA	TCE, PCE plus 6	Air	1	SUMMA	14070	13995, 13999	-30	-3	3/21/2012	12:10:00 PM
94	0-130-1117	53C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	7	14010	-30	-4	3/21/2012	3:41:00 PM
95	0-130-1118	53C-IA	TCE, PCE plus 6	Air	1	SUMMA	280	13919	-30	-5	3/21/2012	3:41:00 PM
96	0-130-1119	49C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	203	13952	-30	-5	3/21/2012	1:36:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

CHAIN OF CUSTODY RECORD

No: 2-032112-180247-0026

Cooler #: 1

Lab: SERAS

R203017
WO# ~~R203016~~ M 3/13/12

Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
-01	-97-0-130-1120	49C-IA	TCE, PCE plus 6	Air	1	SUMMA	216	14044	-30	-4	3/21/2012	1:36:00 PM
02	-98-0-130-1121	51C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	101	13939	-30	-4.5	3/21/2012	1:52:00 PM
-03	-99-0-130-1122	51C-IA	TCE, PCE plus 6	Air	1	SUMMA	180	13769	-30	-3	3/21/2012	1:52:00 PM
04	0-130-1123	46C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	264	13917	-30	-4.5	3/21/2012	1:45:00 PM
05	0-130-1124	46C-IA1	TCE, PCE plus 6	Air	1	SUMMA	36	13962	-30	-2	3/21/2012	1:45:00 PM
06	0-130-1125	46C-IA2	TCE, PCE plus 6	Air	1	SUMMA	150	13997	-30	-2	3/21/2012	1:45:00 PM
07	0-130-1126	50H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	13	14008	-30	-5	3/21/2012	1:59:00 PM
08	0-130-1127	50H-IA	TCE, PCE plus 6	Air	1	SUMMA	27	14013	-30	-2	3/21/2012	1:59:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-180403-0027

Cooler #: 1

Lab: SERAS

WO#R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat	Stop_Time
09	0-130-1128	I15-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	40	13920	-30	-4	3/21/2012	2:22:00 PM
10	0-130-1129	I15-IA	TCE, PCE plus 12	Air	1	SUMMA	211	14030	-30	-3.5	3/21/2012	2:22:00 PM
11	0-130-1130	J3-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	176	13949	-30	-27	3/21/2012	2:28:00 PM
12	0-130-1131	J3-IA1	TCE, PCE plus 12	Air	1	SUMMA	182	14040	-30	-4.5	3/21/2012	2:28:00 PM
13	0-130-1132	J3-IA2	TCE, PCE plus 12	Air	1	SUMMA	14224	13768	-30	-29	3/21/2012	2:28:00 PM
14	0-130-1133	J4-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	194	13994	-30	-5.5	3/21/2012	2:36:00 PM
15	0-130-1134	J4-IA	TCE, PCE plus 12	Air	1	SUMMA	274	14018	-30	-4	3/21/2012	2:36:00 PM
16	0-130-1135	L-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	96	13995	-30	-5.5	3/21/2012	2:46:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright
Contact Phone: 732-321-4284

No: 2-032112-180503-0028

Cooler #: 1

Lab: SERAS

WO# R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
-17	0-130-1136	L-IA	TCE, PCE plus 12	Air	1	SUMMA	139	13985	-30	-4.5	3/21/2012	2:46:00 PM
18	0-130-1137	PS-AMB	TCE, PCE plus 12	Air	1	SUMMA	78	13760	-30	-3.5	3/21/2012	3:00:00 PM
19	0-130-1138	PS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	120	14000	-30	-5	3/21/2012	2:51:00 PM
20	0-130-1139	PS-IA1	TCE, PCE plus 12	Air	1	SUMMA	62	14027	-30	-3	3/21/2012	2:51:00 PM
21	0-130-1140	PS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	32	13947	-30	-5.5	3/21/2012	2:56:00 PM
22	0-130-1141	PS-IA2	TCE, PCE plus 12	Air	1	SUMMA	236	13927	-30	-4.5	3/21/2012	2:56:00 PM
23	0-130-1142	Trip Blank	TCE, PCE plus 12	Air	1	SUMMA	1428	na	-30	-30	3/21/2012	4:36:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzenes, Methylene Chloride and 124-trimethylbenzene

**SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #**